REMARKS

The enclosed is responsive to the Examiner's Final Office Action mailed on October 22, 2002 and is part of a Request for Continued Examination (RCE) under CFR 1.114 that is being filed herewith. Claims 1, 3, 7, 8, 10,11, 13,17,18, 20, 27-36, 41, 51-53 have been amended and Claims 14-16, 37-40, and 44-50 have been cancelled. Claims 1, 3-13, 17-36, 41-43, and 51-53 remain pending, Claim 54 has been added. No new matter has been added.

The Examiner rejected Claims 1, 3, 6,11, 14, 15-18, 21-23, 25, 26, 28 and 32-53 under 35 U.S.C. § 103(a) as being unpatentable over Andre, U.S. Patent No. 5,950,809 (hereinafter "Andre") in view of Helstern, U.S. Patent No. 5,951,150 (hereinafter "Helstern").

The Applicants' remarks shall be presented primarily with respect to Claim 1. However, these remarks are applicable to the other claims of the present application, and the Examiner is respectfully requested to consider these comments and remarks when reviewing the other claims for allowability.

Andre discloses a keyboard wherein each key is provided with two different labels to designate the two functions supported by the key. A first polarizing filter which filters polarized light in a first orientation is provided underneath (or on top of) one of the two labels and a second polarizing filter which filters polarized light in a second orientation is provided underneath (or on top of) the second of the two labels. As described in Andre:

> The filter 45 is provided for filtering the polarized light in a first direction and emitting the polarized light in a second direction perpendicular to the first direction. In contrast, the filter 46 is

provided for filtering the polarized light in said second direction and emitting the polarized light in said first direction. Column 2, lines 60-65 (referring to Fig. 4).

Andre, however, does not teach or suggest the concept of increasing the contrast of one glyph relative to another glyph by selecting the color transmitted from the light source. For example, Claim 1 now recites an apparatus comprising:

> a first key a first non-opaque glyph of a first color disposed on said first key;
>
> a second non-opaque glyph of a second color disposed on said first key;
>
> a light source oriented towards the first key, the light source capable of providing light of a third color or a fourth color, the third color being relatively closer to a complementary color to said first color than to said second color, and the fourth color being relatively closer to a complementary color to said second color than to said first color; and
>
> a light source selector to select between said third color and said fourth color to increase contrast between said first glyph and said second glyph.

Polarization and color (i.e., wavelength) are two completely different physical characteristics of light. The wavelength of light within the visible spectrum indicates the color of the light. For example, red light is defined by a wavelength of 680 nanometers whereas violet light is defined by a wavelength of 410 nanometers. A non-opaque glyph (e.g., a transparent or translucent glyph) of a particular color will absorb its complementary color. Thus, for example, a blue glyph will tend to absorb yellow light. As such, selecting a light source which is close to a complementary color of a first of the two glyphs will cause the second glyph to illuminate more noticeably than the first glyph, thereby increasing the contrast between the two glyphs.

By contrast, polarization filters such as those described in Andre filter light waves having a particular orientation (e.g., horizontal or vertical), rather than a particular wavelength. This is illustrated graphically in Figure 1 below which shows how unpolarized light which vibrates in both a horizontal and vertical plane is filtered by a Polaroid filter to generate polarized light, which vibrates in only a single plane (i.e., a vertical plane in the illustrated example).

However, The manner in which the light is filtered by the Polaroid filter is completely unrelated to the color of the light source or the color of the filter. As such, applicants respectfully submit that Andre does not teach or suggest the use of light source colors and glyph colors to increase or decrease contrast between glyphs as claimed in Claim 1.

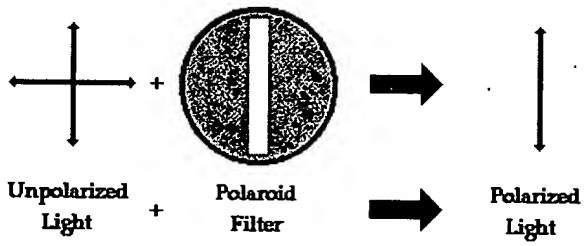

Figure 1

Helstern discloses a display system in which a red light may be transmitted through a red color filter 42 to generate a red color on a display panel 20 and in which a green light may be transmitted through a green color filter 44 to generate a green color on the display panel. The red and green colors may be transmitted concurrently to generate a yellow color on the display panel 20. As set forth in Helstern at column 2, lines 29-43:

> When the light source, 24 is energized, that is, when the lamps 30 and 32 are illuminated, red light is transmitted through the color

> filter 42 to the display panel 20. This results in the display panel being illuminated in red light. When the light source 26 is energized, that is, when the lamps 34 and 36 are illuminated, green light is transmitted through the color filter 44 to the display panel 20. This results in the display panel being illuminated in green light.
>
> If both light sources 24 and 26 are simultaneously energized, light is transmitted through both color filters 42 and 44. This results in light of primary red and green colors being mixed to illuminate the display panel 20 in yellow light . . .

However, Helstern does not teach or suggest increasing or decreasing contrast between two different colored non-opaque glyphs by using different colors for the light source, as claimed in the present application. In fact, the display panel 20 described in Helstern does not even include multiple glyphs. Rather it includes only a single "indicia" 82 which may be illuminated with different colored sources of light. Moreover, the display panel in Helstern is not employed within a key or a keyboard, nor is there any suggestion to use it within a key or keyboard.

The Examiner rejected Claims 7,8,10,12 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Andre in view of Ushimaru, U.S. Patent No. 5,642,929 (hereinafter "Ushimaru"). Ushimaru describes a lighted knob comprising a series of nameplates which may be selectively illuminated by light sources disposed beneath the nameplates. For example, Fig. 1 illustrates three different nameplates 2, 3, and 4 which may be illuminated by a light source. However, like Andre and Helstern, Ushimaru fails to teach or suggest increasing or decreasing contrast between two different colored non-opaque glyphs by using different colors for the light source illuminating the glyphs, as claimed in the present application.

CONCLUSION

In sum, none of the references, alone or in combination, teach or suggest features recited in the present set of claims. For all of the foregoing reasons, Applicants respectfully submit that all pending claims are in condition for allowance. If there are any additional charges, please charge them to our Deposit Account Number 02-2666. If a telephone conference would facilitate the prosecution of this application, the Examiner is invited to contact Thomas C. Webster at (408) 720-8300.

Respectfully submitted,

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Dated: 1/22, 2003

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AMENDMENTS SHOWING CHANGES

IN THE CLAIMS:

Please cancel claims 14-16, 37-40, and 44-50.

Please amend the following claims 1, 3, 7, 8, 10,11, 13,17,18, 20, 27-36, 41, 51-53. Please add new claim 54.

1. (Twice Amended) An apparatus comprising:

a first key;

a first non-opaque glyph of a first color disposed on said first key;

a second non-opaque glyph of a second color disposed on said first key;

a light source oriented towards the first key, the light source capable of providing [two or more] light of a third color or a fourth color, the third color being relatively closer to a complementary color to said first color than to said second color, and the fourth color being relatively closer to a complementary color to said second color than to said first color [selectable types of light having different characteristics, at least one of the different characteristics being wavelength]; and

a light source selector to select between said third color and said fourth color to increase contrast between said first glyph and said second glyph.

[one or more glyphs disposed on said first key, each glyph having a given visual contrast that is dependent on the wavelength of the light being provided from the light source.]

3. (Twice Amended) The apparatus as recited in claim 1, [wherein additional characteristics of said light source include intensity or location] wherein

said light source selector selects either said third color or said fourth color responsive to a selection of a function associated with said second glyph or said first glyph.

4. (Once Amended) The apparatus as recited in claim 1, wherein regions of the first key not comprising a glyph are white.

5. (Once Amended) The apparatus as recited in claim 1, wherein regions of the first key not comprising a glyph are black.

6. (Once Amended) The apparatus as recited in claim 1, wherein the first key is translucent.

7. (Twice Amended) The apparatus as recited in claim 6, wherein [a] said first and second [glyph] glyphs on the first key [is] are transparent.

8. (Twice Amended) The apparatus as recited in claim 6, wherein [a] said first and second [glyph] glyphs on the first key [is] are translucent.

9. (Once Amended) The apparatus as recited in claim 1, wherein the first key is transparent.

10. (Twice Amended) The apparatus as recited in claim 9, wherein [a] said first and second [glyph] glyphs on the first key [is] are translucent.

11. (Twice Amended) The apparatus as recited in claim 1, further comprising:

a third non-opaque glyph of a fifth color disposed on said first key;

wherein the light source is capable of providing light of a sixth color, the sixth color being relatively closer to a complementary color to said fifth color than to said first color or said second color, the light source selector to select between said third color, said fourth color and said sixth color to increase contrast between said first glyph, said second glyph and said third glyph. [including a plurality of additional keys having one or more glyphs disposed thereon, each glyph having a given visual contrast that is dependent on the wavelength of the light being provided from the light source.]

12. (Once Amended) The apparatus as recited in claim 11, wherein the glyphs on two or more of the plurality of keys are transparent.

13. (Twice Amended) The apparatus as recited in claim 11, wherein the [glyphs on two or more of the plurality of keys] first glyph, second glyph and third glyph are translucent.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Twice Amended) The apparatus as recited in claim [16,] 1 wherein the [wavelength of the type of] light of the third color is [selected produces a color] complementary to the light of the first color and wherein the light of the

fourth color is complementary to the light of the second color [of a glyph that corresponds to the selected type of light].

18. (Twice Amended) The apparatus as recited in claim [16,] 1 wherein the selected type of light decreases the visual contrast between a corresponding glyph and the remainder of the key over the visual contrast between a non-corresponding glyph and the remainder of the key.

19. (Once Amended) The apparatus as recited in claim 18, wherein the selected type of light is of a complementary color to the color of the corresponding glyph.

20. (Twice Amended) The apparatus as recited in claim [16,] 1 wherein the selected wavelength of the light source decreases the visual contrast between a glyph corresponding to the type of light selected and the remainder of the key over the visual contrast between a non-corresponding glyph and the remainder of the key.

21. (Unchanged) The apparatus as recited in claim 1, wherein the light source is a light emitting diode ("LED").

22. (Once Amended) The apparatus as recited in claim 1, wherein the light source is at least one of a group consisting of: a fluorescent light source, a laser light source, an incandescent light source, an ultraviolet light source, or an infrared light source.

a light source oriented towards the first key, the light source capable of providing [two or more] light of a third color or a fourth color, the third color being relatively closer to a complementary color to said first color than to said second color, and the fourth color being relatively closer to a complementary color to said second color than to said first color

[a plurality of glyphs on one or more of the keys of the keyboard wherein each glyph on a given key is of a specified color;]

a light source to provide [a plurality of selectable colors] light of a third color or a fourth color, the third color being relatively closer to a complementary color to said first color than to said second color, and the fourth color being relatively closer to a complementary color to said second color than to said first color, wherein the light source is located on or outside of the perimeter of the keyboard[, wherein the specified color increases the visual contrast between a glyph on a key of the keyboard and a remaining non-glyph region of the key over the visual contrast between another glyph on the key and the remaining non-glyph region of said key]; and

a glyph selector communicatively coupled to the light source to select [from the plurality of selectable colors] between said third color and said fourth color to increase contrast between said first glyph and said second glyph.

42. (Unchanged) The apparatus as recited in claim 41 wherein a light ray from the light source is substantially conducted laterally from the perimeter of the keyboard through at least one side of at least one of the plurality of keys.

43. (Once Amended) The apparatus as recited in claim 41, wherein a light ray from the light source is substantially conducted laterally through a first key of the keyboard to a second key of the keyboard.

44. (Cancelled)

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Cancelled)

49. (Cancelled)

50. (Cancelled)

51. (Once Amended) The apparatus as recited in claim 1, wherein the first glyph and the second glyph [glyphs] are either symbols, emblems, marks, figures, patterns, characters, letters, digits, or punctuation marks.

52. (Once Amended) An apparatus comprising:

a first key;

a first non-opaque region of a first color disposed on said first key;

a second non-opaque region of a second color disposed on said first key;

a light source oriented towards the first key, the light source capable of providing [two or more selectable types of light having different characteristics, at

least one of the differing characteristics being wavelength] light of a third color or a fourth color the third color being relatively closer to a complementary color to said first color than to said second color, and the fourth color being relatively closer to a complementary color to said second color than to said first color; and

a light source selector to select between said third color and said fourth color to increase contrast between said first region and said second region.

[one or more regions into which the key is divided, each region having a given visual contrast with the remainder of the first key that is dependent on the wavelength of the light being provided from the light source.]

53. (Once Amended) The apparatus as in claim 52 further comprising:

a first glyph disposed within said first region; and

a second glyph disposed within said second region.

[A method comprising:

providing a key wherein the key is partitioned into one or more given regions wherein each region is of a different color; and

selecting one of the regions by lighting the key with a selected light source that produces light of a given wavelength which increases the visual contrast between the selected region and the remaining portion of the key relative to the visual contrast between the non-selected region and the remaining portion of the key.]

Please add new claim.

54. (New) The apparatus as in claim 53 wherein said first glyph and said second glyph are opaque.